

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/610,461	07	7/05/2000	Juha Ojanpera	460-009524-US(PAR)	460-009524-US(PAR) 4189	
2512	7590	12/26/2002				
PERMAN &		Ī	EXAMINER			
425 POST RO FAIRFIELD,		4		OPSASNICK,	OPSASNICK, MICHAEL N	
				ART UNIT	PAPER NUMBER	
				2655	<u></u>	
				DATE MAILED: 12/26/2002	:	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
A. Office Action Summany		09/610,461	OJANPERA, JUHA				
$\mathcal{N}$	Office Action Summary	Examiner	Art Unit				
(7)		Michael N. Opsasnick	2655				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on <u>03 October 2002</u> .						
2a)⊠	,	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
, —	Claim(s) <u>1-39</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
·	Claim(s) is/are allowed.						
,	Claim(s) <u>1-39</u> is/are rejected.						
	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
	The specification is objected to by the Examine	r.					
<i>'</i> —	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
10/							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
,.	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1)  Notice 2)  Notice	be of References Cited (PTO-892) be of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) 2	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Application/Control Number: 09/610,461

Art Unit: 2655

## **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al (5819212).

As per claims 1,21,27,30, and 38, <u>Matsumoto et al (5819212)</u> teaches coding a audio signal:

"examining a part of the audio signal......to be coded......producing a set of predicted......pitch predictor orders" as LPC analysis, Fig. 1, subblock 130

"determining a coding efficiency....using the determined coding efficiency......to be coded....by using information....audio signal to be coded" as band splitting and coding at different rates (fig. 5, col. 10 lines 19-65) and V/UV decisions based on the input signal (col. 11 lines 1-24)

As per claim 2, <u>Matsumoto et al (5819212)</u> teaches predictive coding (Fig. 1, subblock 130)

As per claims 3,29,32,36,37, and 39, <u>Matsumoto et al (5819212)</u> teaches prediction based on input audio (Fig. 1, subblock 130)

Page 3

Application/Control Number: 09/610,461

Art Unit: 2655

As per claims 4,22,28,31, <u>Matsumoto et al (5819212)</u> teaches CELP based encoding using error calculations (col. 10 lines 59-65)

As per claims 5-13,23,35, <u>Matsumoto et al (5819212)</u> teaches the calculation of distortion errors based on frequency information and coding efficiency (col. 20 lines 20-45)

As per claim 14, <u>Matsumoto et al (5819212)</u> teaches MDCT (col. 18 lines 23-50)
As per claims 15,24,33, and 34, <u>Matsumoto et al (5819212)</u> teaches data order,
lag, pitch predictor coefficients, and error information (col. 18, lines 20-65)

As per claims 16,17, and 25, Matsumoto et al (5819212) teaches input speech frames (Fig. 6a,b, and c)

As per claims 18,19, <u>Matsumoto et al (5819212)</u> teaches a least squares method, and the coding error derived from the predictive error (col. 20 lines 15-58).

As per claims 20,26, <u>Matsumoto et al (5819212)</u> teaches a transmitting device (col. 1 lines 1-15)

## Response to Arguments

3. Applicant's arguments filed 10/3/2002 have been fully considered but they are not persuasive. As per applicant's arguments that the prior art applied (Matsumoto) does not determine a coding efficiency, examiner disagrees and points to the subband encoding shown in Fig. 5 (as applied to the claims above). Examiner notes that the subband filtering is designed to determine which frequency ranges are in the signal, and codes at different rates based on that

Application/Control Number: 09/610,461

Art Unit: 2655

information (and inherently the most efficient coding technique). Furthermore, Matsumoto teaches a V/UV discrimination circuit to determine which coding method would be most efficient (col. 11 lines 1-24).

#### Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 4

Application/Control Number: 09/610,461

Art Unit: 2655

# 5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT") Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington. VA., Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

mno

12/15/02

DORIS H. TO

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600